

ABOUT THIS PROJECT

PROJECT NAME: Statewide Historical Bridge Survey Update

PROJECT NUMBER: TR-819

PROJECT FUNDING PROGRAM: Iowa Highway Research Board

PROJECTED END DATE: June 2025

PROJECT CHAMPION: Brennan Dolan, Iowa DOT brennan.dolan@iowadot.us

PROJECT MANAGER: Vanessa Goetz, Iowa DOT vanessa.goetz@iowadot.us

PRINCIPAL INVESTIGATOR: Bear Creek Archeology, Inc.

RESEARCH IN PROGRESS

An updated inventory of Iowa's bridges will help state and local engineers prioritize maintenance

lowa is home to more than 14,000 bridges that were built between 1876 and 1985. Many of these structures are historically significant and subject to state and federal regulations.

In Iowa, each of the 99 county engineers is responsible for planning and budgeting the maintenance and rehabilitation activities for the bridges in their jurisdiction. Understanding which of these bridges will require special permits or other considerations can help engineers consider the appropriate maintenance and repair options, prioritize projects and allocate their limited funds accordingly.

For this project, researchers will evaluate all of the bridges across the state built within the designated timeframe and document 45 different characteristics for each structure. It's a big undertaking, but this method offers a number of benefits to Iowa's local transportation agencies, as well as to the state.

"Each county could conduct an assessment of their own bridges at their own expense," explained Brennan Dolan of Iowa DOT's Location and Environment Bureau. "But evaluating all of the bridges across the state in a single project will provide more uniform information, be more efficient and cost-effective, and give us a much more robust picture of Iowa's bridges."

Similar statewide evaluations took place in 1995 and 2011; this third survey will ensure engineers are working with up-to-date information. "lowa's bridge inventory changes every day," Brennan said. "As these structures are repaired and replaced over time, an updated inventory that includes the condition of each bridge can help city and county engineers manage these assets effectively."

The engineering study is expected to conclude in June 2025.

To learn more about this project and subscribe to updates, visit Idea #3794.

IOWA DOT RESEARCH iowadot.gov/research ideas.iowadot.gov

